

## ABSTRACT OF THE DISCLOSURE

A non-volatile memory and the fabrication thereof are described. The non-volatile memory comprises a word-line on a substrate, a charge trapping layer between the word-line and the substrate, and a contact electrically connecting with the word-line over the substrate. In addition, there is a protective metal line electrically connecting  
5 with the word-line and with a grounding doped region in the substrate via different contacts, respectively. The protective metal line has a resistance higher than that of the word-line.